

Work Order ID 101742

May-13-13 1:13:16 PM

101742

Page 1

Item ID: D3943-051

Revision ID:

Item Name: Handle Assembly

Start Date: 5/08/13

Start Qty: 15.00

15

Required Date: 5/24/13

Req'd Qty: 18.00

15

Reference:

Approvals: Process Plan: MLJ

Date: 13-05-14 Tooling:

Date:

Run Start

QC:

Date: SPC (Y/N):

Date:

Stop

NR1

NR2

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

| | |
|-------|---|
| D3943 | E |
|-------|---|

| | |
|-----|---|
| 100 | Weld per dwg A/R Steel rod Batch: <u>11/22/557</u> 0.00 |
|-----|---|

100

Large Fab

Large Fab

Memo 0.00

Assemble with handle as per dwg

③ 13-5-27

| | | |
|-----|---|------|
| 110 | QC5- Inspect part completeness to step on W/O | 0.00 |
|-----|---|------|

110

QC

Quality Control

Memo 0.00

③ 13-5-27

DAS
09
9-09

| | | |
|-----|--|------|
| 120 | QC9- Inspect visual per QSI004- Fusion Welds | 0.00 |
|-----|--|------|

120

QC

Quality Control

Memo 0.00

③ 13-5-27

DAS
09
9-09

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | |
|---|--|--|------------------------------------|--|------------------------------------|--------------------------------------|-------------|--------------|--------------|--|--|---|--|
| Work Order: _____ | | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | | |
| Part No. _____ | Rework <input type="checkbox"/> | Scrap <input type="checkbox"/> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | |
| NCR No. _____ | Use-as-is <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coor. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | |
| | Work Order Update <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | | | |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled | |

Work Order ID 101742

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101742

Page 2

Item ID: D3943-051

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Handle Assembly

Stop

NS2

Start Date: 5/08/13 Start Qty: 15.00

15

Cust Item ID:

Required Date: 5/24/13 Req'd Qty: 15.00

15

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
Number

Insp.

Stamp

130

130

Powdercoat

Powder Coating

Hybrid safety Yellow 4.3.5.12

0.00

3x4mp 13/05/28

Memo

0.00

1- MASK THREADS PRIOR TO PAINTING AS PER DWG

2- POWDER COAT:

Start Time:

Oven Temperature:

Finish Time:

11:45

400° F

12:15

140

140

QC

Quality Control

QC3- Inspect Part Finish

0.00

3x 1 M 12/05/20

Memo

0.00

150

150

Packaging

Packaging

Identify as per dwg & Stock Location: w/o

0.00

Memo

101374

0.00

3 2 13-5-28

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: _____ Date: _____

| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION | | AGAINST DEPARTMENT/PROCESS | | | | | | | | |
|--|------|------|-----|--|--|--|---|--|--------------|--------------|--|--|---|--|
| | | | | Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> | Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> | Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> | Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> | | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | | | |
| Doc/Data | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | | | | |
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled | |
| | | | | | | | | | | | | | <input type="checkbox"/> Other | |

Work Order ID 101742

101742

Page 3

May-13-13 1:13:16 PM

Item ID: D3943-051

Accept

N900040100

Setup

Start *NS1*

Revision ID:

Stop

NS2

Item Name: Handle Assembly

Start Date: 5/08/13 Start Qty: 15.00

15

Cust Item ID:

Required Date: 5/24/13 Req'd Qty: 15.00

15

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

160

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

13/5/30/08

Memo

0.00

MF

13-5-29

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

OA Closed: _____ Date: _____

| Work Order: _____ | | | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | |
|--|------|------|--|---|------------------------------------|--|--------------------------------------|-------------|--------------|--------------|--|
| | | | Rework <input type="checkbox"/> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | |
| | | | Scrap <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coor. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | |
| | | | Use-as-is <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | |
| | | | Work Order Update <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | |
| Doc/Data | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | |
| Operator | | | | | | | | | | | |
| Material | | | | | | | | | | | |
| Setup | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Process | | | | | | | | | | | |
| Supplier | | | | | | | | | | | |
| Training | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | |
| Landing Gear | | | | General | | | | | | | |
| <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | | | | | |
| | | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | | | | | |
| | | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | | | | | | |
| | | | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled | | | | | | | |
| | | | | <input type="checkbox"/> Other | | | | | | | |

Picklist Print

May-13-13 1:13:15 PM

Page 1

Work Order ID: 101742

Parent Item: D3943-051

Parent Item Name: Handle Assembly

Start Date: 5/08/13

Required Date: 5/24/13

Start Qty: 15.00

Required Qty: 15.00

Comments: IPP RevA: add DEO DD 09.11.18 verified by:JLM IPP Rev:B as per dwg REV.C DD
10.02.22 verified by:EC IPP REV:C 11.08.16 AS PER REV.E DD VERF:JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D3943-5 Plate | | Manufactured | No | | | 100 | Each | 7.0000 | 1 | 15 | EL | 13-5-27 | |
| D3943-7 Stud | | Manufactured | No | | | 100 | Each | 15.0000 | 2 | 30 | EL | 13-5-27 | |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST075 | 7 | |
| 85890 | 1 | |
| 91424 | 6 | |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| WA001 | 11 | |
| 52980 | 1 | |
| 85854 | 10 | |
| WA002 | 4 | |
| 69044 | 4 | |

A 101470 *10*

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: _____ Date: _____

| Work Order: _____ | | | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | | | | | |
|--|------|------|--|---|------------------------------------|--|--------------------------------------|---|-------------|--------------|--------------|--|--|---|--|
| | | | Rework <input type="checkbox"/> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | |
| | | | Scrap <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coor. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | |
| | | | Use-as-is <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | |
| | | | Work Order Update <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | | Initial Chief Eng | Action Description | | Sign & Date | Verification | QC Inspector | | | | |
| Doc/Data | | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | | | |
| FAULT CATEGORY | | | | | | | | | | | | | | | |
| Landing Gear | | | | General | | | | | | | | | | | |
| <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | | | | <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | | | | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | | | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled | |
| | | | | | | | | | | | | <input type="checkbox"/> Other | | | |

| ITEM No. | QTY -041 | QTY -051 | QTY -053 | PART NUMBER | DESCRIPTION | PREFERRED SUPPLIER |
|----------|----------|----------|----------|-------------|---|-----------------------------------|
| 1 | X | | | D3943-041 | GROUND HANDLING CRANK ASSEMBLY | |
| 5 | 1 | X | | D3943-051 | HANDLE ASSEMBLY | |
| 6 | 1 | | X | D3943-053 | CHAIN ASSEMBLY | |
| | | | | | | |
| D | 11 | 1 | | D3943-1 | HANDLE | |
| | 12 | 1 | | D3943-3 | HANDLE EXTENSION | |
| | 13 | 1 | | D3943-5 | PLATE | |
| | 14 | 2 | | D3943-7 | STUD | |
| | 15 | | 1 | D3943-9 | CHAIN | USE CHAIN SUPPLIED WITH ITEM 39 |
| | 16 | | 1 | D4405-1 | EYE AND FORK SWIVEL | |
| | 21 | 1 | | D2690-4 | LANYARD | |
| | 22 | 1 | | D3585-1 | SET SCREW | |
| | 23 | 1 | | D3949-041 | REMOVE BEFORE FLIGHT FLAG | |
| | 24 | | 1 | D3954-5 | CHAIN LUG | |
| | 25 | 1 | | D3954-7 | RATCHET LUG | |
| | 26 | | 1 | D3954-9 | GWT CHAIN PIN | |
| | 31 | 1 | | AN5-11A | BOLT | |
| | 32 | 1 | | AN960-516 | WASHER | |
| | 33 | 1 | | MS21042L5 | NUT | |
| | 39 | 1 | | 8143919 | LEVER CHAIN HOIST (POWER FIST) | PRINCESS AUTO / 4000 lbs CAPACITY |
| | 51 | 1 | | S-1475 | SPRING | REID SUPPLY |
| | 52 | 1 | | 3408A59 | BALL PLUNGER | McMASTER CARR |
| | 53 | 1 | | HX-15 | SOCKET HEAD CAP SCREW $\frac{1}{4}$ -20 UNC X 0.75 LG | HASKINS |
| | 54 | 1 | | HX-16 | SOCKET HEAD CAP SCREW $\frac{1}{4}$ -20 UNC X 1.0 LG | HASKINS |

E

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
- WORK ORDER

NO 101742 MLC

13-05-14

RELEASED

2011-07-29

| | | | |
|------------|--|---|--------------|
| E | CHANGED D3945-3 MAT'L TO SS (B8-5); FINISH NOW "NONE" (A7-5); TAP DRILL FOR 1/4-20 UNF-2B WAS PILOT HOLE NOTE (B1-5). PER PAR11-113. | MB | 11.07.27 |
| D | SHT 1 PL, ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS, ITEM 16 ADDED (VIEWS UPDATED). SHT 2 ZN D3 FLAG RELOCATED. SHT 3. ZONE D3, Ø0.12 HOLE DELETED. (SEE NCR 11-495) | AJS | 11.05.16 |
| C | RMV FINISH -041 (ZN A8-2), ADD NEW FINISH -051/-053/-1/3 (A8-3/4/-5), ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001 | CP | 10.01.26 |
| B | SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT. | AJS | 09.10.15 |
| A | NEW ISSUE | AJS | 09.05.13 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | DSTO/N / AJS | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | | DRAWING NO. | REV. E |
| CHECKED | <i>ASS</i> | D3943 | SHEET 1 OF 5 |
| MFG. APPR. | | TITLE | SCALE |
| APPROVED | <i>WJ</i> | GROSS WEIGHT TOW CRANK ASSY NTS | |
| DE APPR. | N/A | | |
| DATE | 11.07.27 | COPYRIGHT © 2009 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |

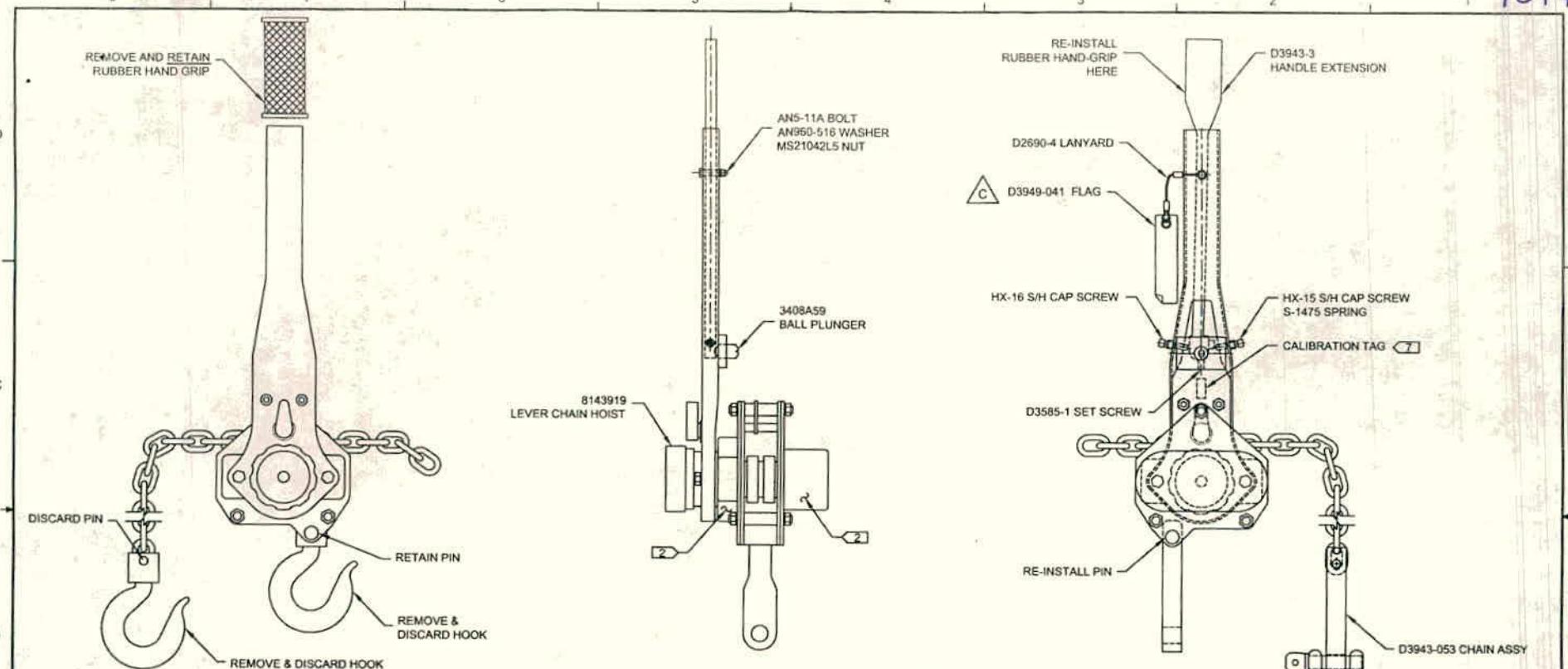
8 7 6 5 4 3 2 1

D

C

B

A



8143919 LEVER CHAIN HOIST
(SHOWN PRIOR TO MODIFICATION)
(CHAIN SHOWN SHORTENED FOR CLARITY)

(CHAIN NOT SHOWN FOR CLARITY)

(CHAIN SHOWN SHORTENED FOR CLARITY)

D3943-041 GROUND HANDLING CRANK ASSMBLY

| | | |
|------------|-------------|-----------------------------|
| DESIGN | DSTOW / AJS | DART AEROSPACE LTD |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | A/S | DRAWING NO. |
| MFG. APPR. | | REV. E |
| APPROVED | R/R | D3943 |
| DE APPR. | N/A | SHEET 2 OF 5 |
| DATE | 11.07.27 | TITLE |
| | | SCALE |
| | | GROSS WEIGHT TOW CRANK ASSY |
| | | NTS |

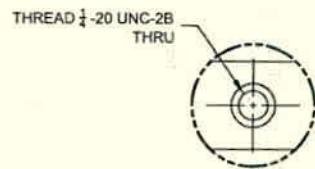
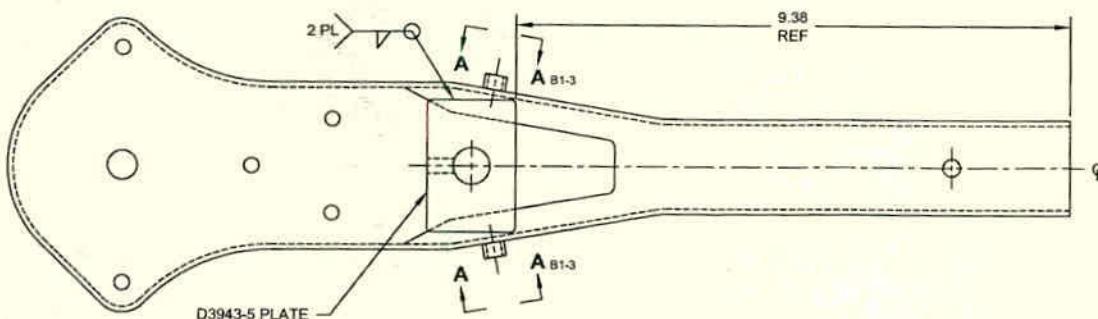
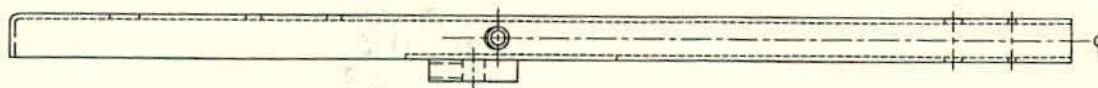
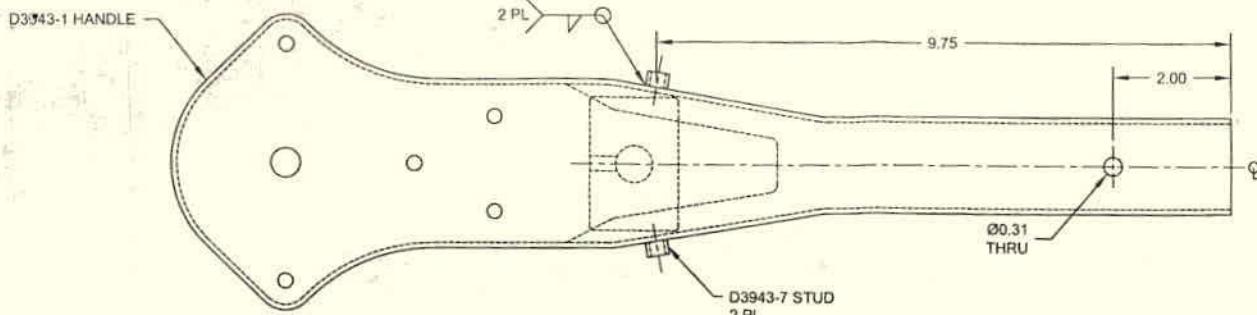
NOTES -041:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3943-041" USING FINE POINT PERMANENT INK MARKER
- 7) CALIBRATION TAG PER DART QSI 008 4.4 (ZN C1-2)

RELEASED
2011-07-29

JK

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VIEW A-A AS-3
(SCALE 2X) BS-3

D3943-051 HANDLE ASSEMBLY

NOTES -051:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) MASK ALL THREADS PRIOR TO FINISHING

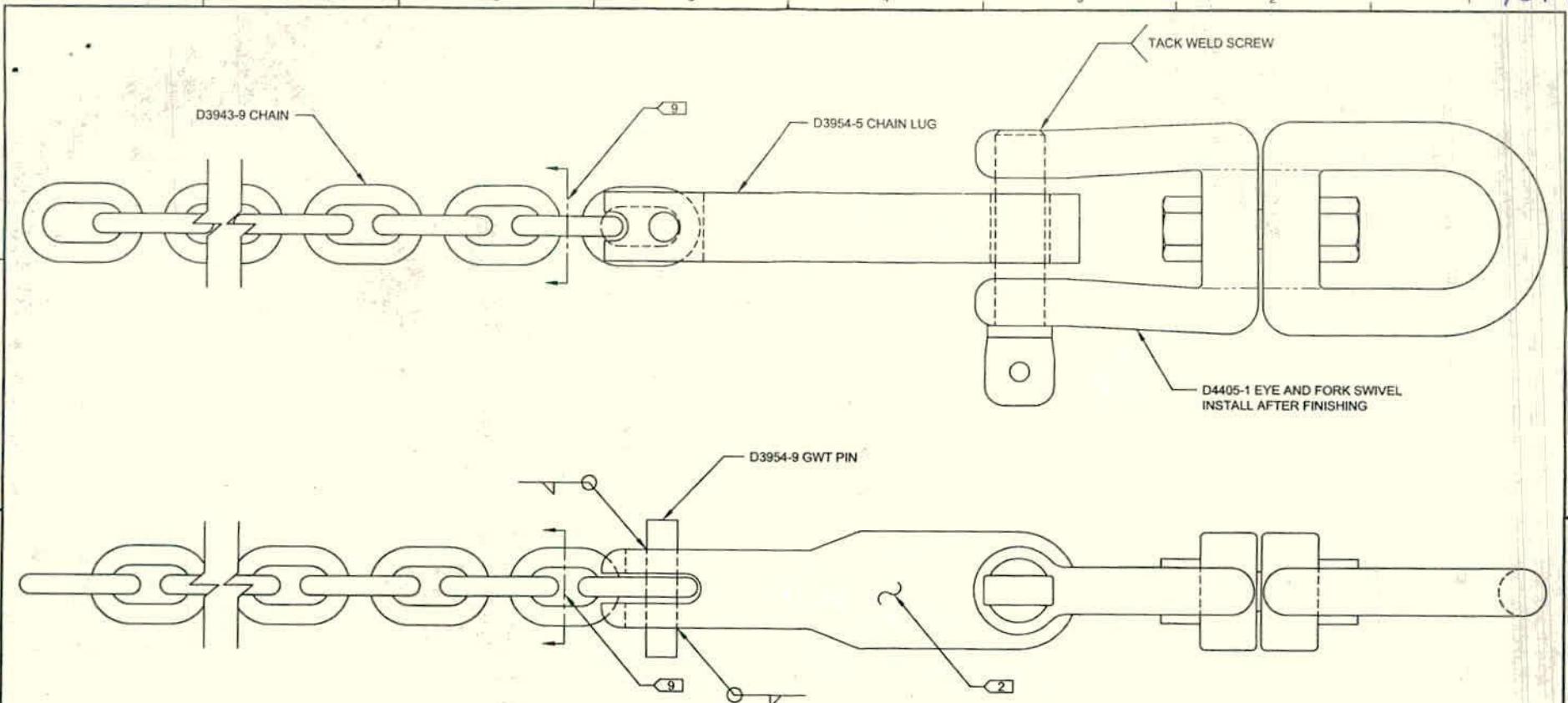
| | | |
|------------|-----------|--|
| DESIGN | DSTOW/AJS | DART AEROSPACE LTD |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | AJS | DRAWING NO. |
| MFG. APPR. | | REV. E |
| APPROVED | WJ | D3943 |
| DE APPR. | N/A | SHEET 3 OF 5 |
| DATE | 11.07.27 | TITLE SCALE GROSS WEIGHT TOW CRANK ASSY NTS |

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MM

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



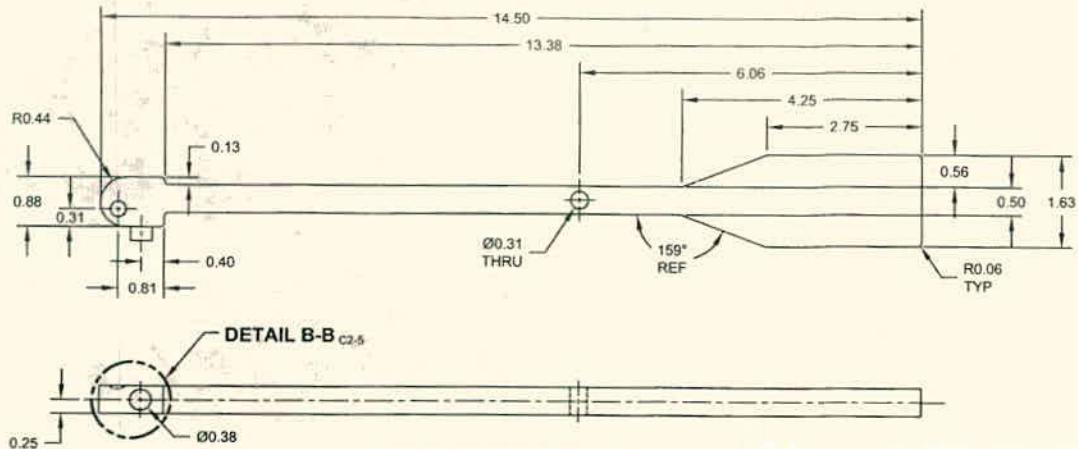
D3943-053 CHAIN ASSEMBLY

NOTES -053:

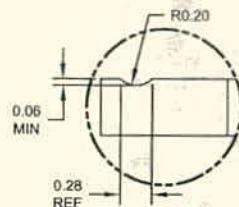
- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) WELD PER QSI 004
- 9) MASK CHAIN FROM THIS POINT ON PRIOR TO FINISHING

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2011-07-29
MP

| DESIGN | DSTOW/AJS | DART AEROSPACE LTD | |
|------------|-----------|---|--------------|
| DRAWN | <i>AS</i> | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | <i>AS</i> | DRAWING NO. | REV. E |
| MFG. APPR. | <i>AS</i> | D3943 | SHEET 4 OF 5 |
| APPROVED | <i>AS</i> | TITLE | SCALE |
| DE APPR. | <i>AS</i> | GROSS WEIGHT TOW CRANK ASSY | NTS |
| DATE | 11.07.27 | COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD | |



D3943-3 HANDLE EXTENSION

DETAIL B-B C7-5
(DIMPLE DETAIL)
(SCALE 2X)

NOTES:

1) MATERIAL -3: AISI 304/316 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M304S

OR:

AISI 303 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
ASTM A240 OR ASME SA240
REF DART SPEC M303S

-5: MILD STEEL, SHEET

AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S

OR:

MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B

-7: MILD STEEL, ROUND BAR

AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R

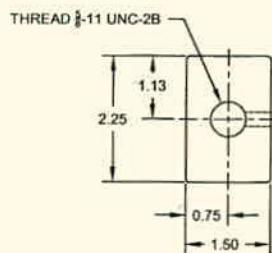
2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

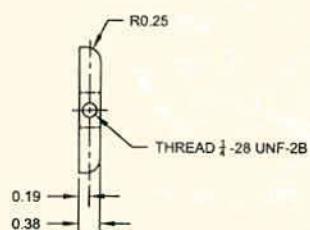
4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: N/A



D3943-5 PLATE

D3943-7 STUD
(SCALE 2X)RELEASED
2011-07-29
MD

| DESIGN | DSTOW / AJS | DART AEROSPACE LTD | |
|------------|-------------|-----------------------------|--------------|
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | REV. E |
| | | D3943 | SHEET 5 OF 5 |
| MFG. APPR. | | TITLE | SCALE |
| APPROVED | | GROSS WEIGHT TOW CRANK ASSY | NTS |
| DE APPR. | | | |
| DATE | 11.07.27 | | |

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